

Work Order ID 137224

137224

Page 1

Tuesday, September 29, 2015 8:18:22 AM

Item ID: D4472-042 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Fwd Rib Assembly, RH
 Start Date: 9/23/2015 Start Qty: 5.00 ***5*** Cust Item ID:
 Required Date: 9/23/2015 Req'd Qty: 5.00 ***5*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: SEP 24 2015 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4472	REV B

100		0.00							
-----	--	------	--	--	--	--	--	--	--

100
 Bandsaw
 Jeaspa Bandsaw

Memo
 CUT BLANK 17" LONG

0.00

5 10/29

110		0.00							
-----	--	------	--	--	--	--	--	--	--

110
 Purchasing
 Purchasing

Memo
 ISSUE P/O: 29983
 TO ARCHUR PRESSION(GLOBUS)
 C OF C IS REQUIRED

0.00

CL OCT 02 2015 5

115	Receive & Inspect for Damage & Mat'l Certs	0.00							
-----	--	------	--	--	--	--	--	--	--

115
 Packaging
 Packaging

Memo

0.00

5x 15-11-15

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

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 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC6- Inspect dimensions to drawing	0.00							DAS SS 9-89
120									
QC	Memo	0.00							
Quality Control									
130	Chemical Conversion Coat per QSI005 4.1	0.00							
130									
HandFinish	Memo	0.00							
Hand Finishing									
140	QC7-Inspect Chemical Conversion Coat	0.00							DAS SS 9-89
140									
QC	Memo	0.00							
Quality Control									

NOV 05 2015
P.T.O.

NOV 09 2015

NOV 09 2015

DQA:

Date:

16/02/04



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

16/02/03

Work Order update only

Work Order: <u>137224</u>		DISPOSITION		AGAINST DEPARTMENT/PROCESS							
Part No. <u>04472-042</u>		Rework ☐		Skid-tube ☐		Cross tube ☐		Water Jet ☐		Engineering ☐	
NCR No. <u>16-5568</u>		Scrap ☒		Machining ☐		Small Fab ☐		Prod. Eng. Coord. ☐		Quality ☐	
		Use-as-is ☐		Thermoforming ☐		Finishing ☐		Rec/Store/Packaging ☐		Other ☐	
		Suspected Unapproved ☐		Large Fab ☐		Composite ☐		Supplier ☒			
Date: <u>15-10-02</u>		Step #: <u>110</u>		QTY Effective: <u>1</u>				MRB (QS1042) Approval			
Description Work Order Deviation				Disposition				DAS 9 9-89			
Supplier drill one hole at 0.355 instead of .098				scrap / destroy no replace				Completed By <u>33</u> 9-89 NOV 25 2015			
								Lead hand / Supervisor Approval Verification DAS 9 9-89			
								QC / QA Coordinator Approval DAS 9 9-89			
								15-11-25			
Root Cause		FAULT CATEGORY									
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐						
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐						
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐						
Equip/Tooling ☐	Supplier ☒	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☒						
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐						
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐						
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐						
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐						
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐						
Substation ☐	Process Improvement ☐	Marks/Chatter ☒	Drill Holes ☒	Misaligned/off center ☐	Turning Sequence ☐						
Past Expiry Date ☐	Manufacturing Process ☐										
Misidentified ☐	Past Due ☐	OTHER: <u>supplier</u>									

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Spray Painting per QSI005 4.2	0.00							DAS 41 9-89 15-11-20
150									
SprayPaint	Memo	0.01							
Spray Painting	PRIME TEMPO GREY 132910								
160	QC3- Inspect Part Finish	0.00							DAS 38 9-89 NOV 23 2015
160									
QC	Memo	0.00							
Quality Control									
180		0.00							DAS 36 9-89 15/11/23
180									
Small Fab	Memo	0.00							
Small Fab	install nutplates as per dwg								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-89
190									
QC	Memo	0.00							
Quality Control									NOV 24 2015
200	Identify as per dwg & Stock Location: <u>St232</u>	0.00							
200									
Packaging	Memo	0.00							NOV 24 2015
Packaging									
210	QC21- Final Inspection - Work Order Release	0.00							
210									
QC	Memo	0.00							
Quality Control									MCS 15-11-25

MCS 15-11-25

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																
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Picklist Print

Tuesday, September 29, 2015 8:18:28 AM

Page 1

Work Order ID: 137224

137224

Parent Item: D4472-042

D4472-042

Parent Item Name: Fwd Rib Assembly, RH

Start Date: 9/23/2015

Required Date: 9/23/2015

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP REV:A NEW ISSUE 13-01-17 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4472-2P		Purchased	No				Each	0.0000		5			
D4472-2P									**	\$X		2015-11-14	
Fwd Rib, RH													
M6061T6B1.000X06.00		Purchased	No				f	39.8040		7.473684			
0													

M6061T6B1 000X06 000

6061T6 BAR 1.00 X 6.00

Location	Loc Qty	Loc Code
MAT003	39.804	
m125771	2.4	
m127797	2.7	
m129530	2.15	
m129639	14.325	
m130013	18.229	

MS21069L08

Purchased

No

Each

647.0000

15

MS21069L 08

ANCHOR NUT

Location	Loc Qty	Loc Code
ST301	647	
123522	647	

MS20426AD3-5

Purchased

No

Each

5,067.000

30

MS20426AD3-5

Rivet

Location	Loc Qty	Loc Code
GA	4214	
4533	4214	
ST313	853	
4444	853	

conf 15/10/29

15/11/23

DAS 36 9-89

15/11/23

DAS 36 9-89

30

DQA: _____ Date: _____



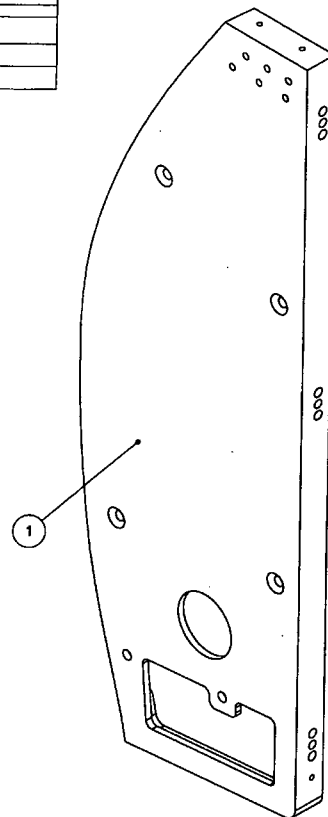
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

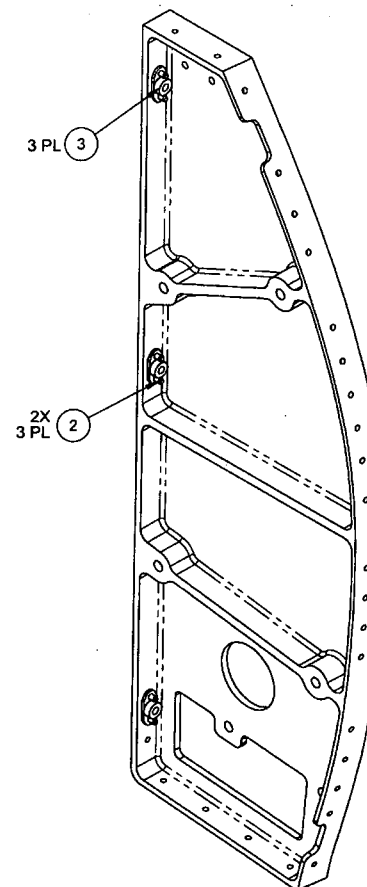
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4472-041	FWD RIB ASSY (LH)
1	1	D4472-1	FWD RIB (LH)
2	6	MS20426AD3-5	RIVET, CSK
3	3	MS21069L08	NUTPLATE



D4472-041 FWD RIB ASSY (LH)



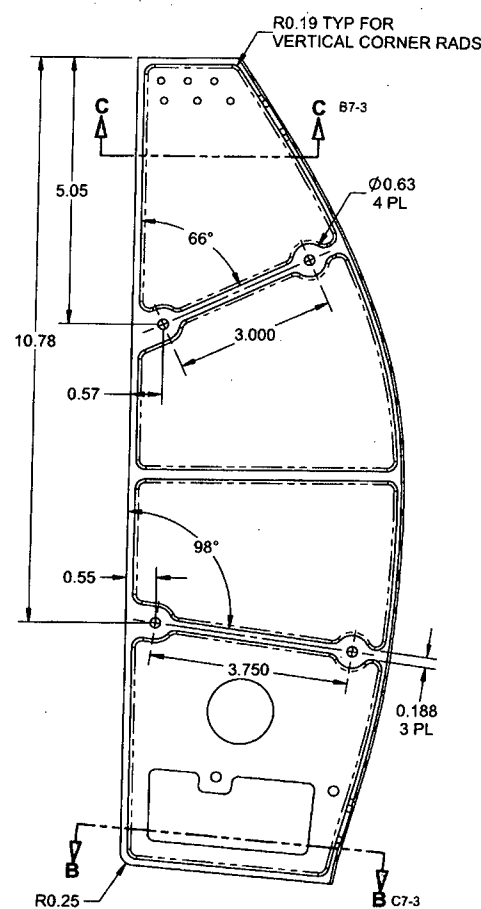
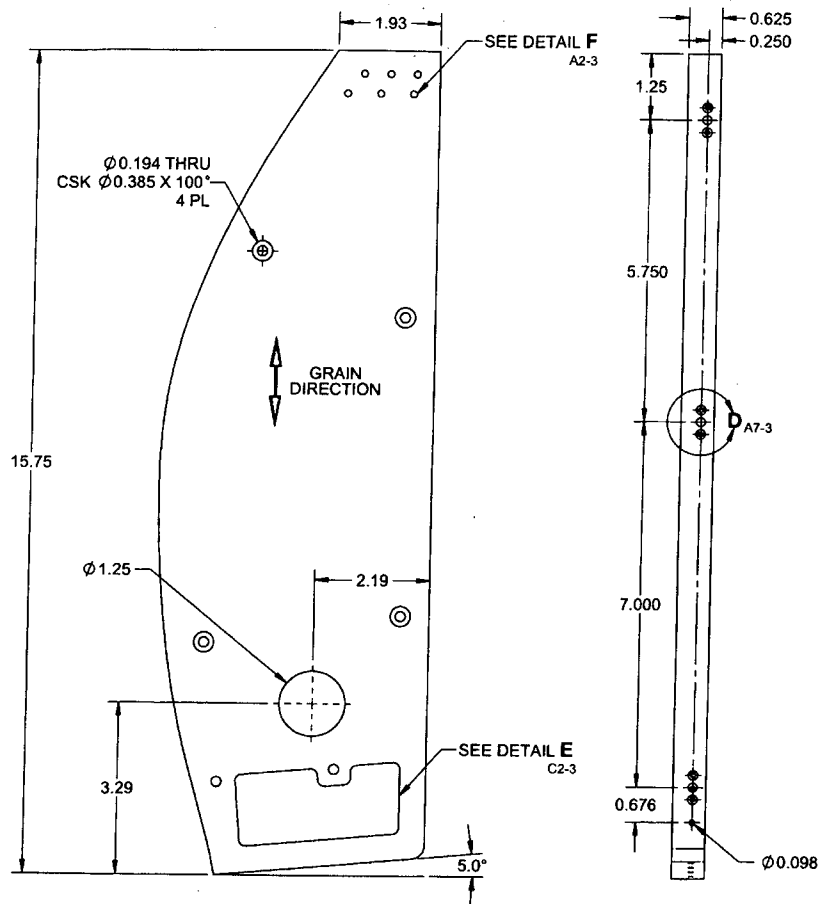
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.15 lbs

RELEASED
2012-09-18

58 1372220150925

B	COMPLETE REDESIGN SEE REV A FOR DETAILS. ADDED -042 & -2 (RH CONFIGURATION). PRIMER NOTE ADDED.	AJS	12.09.10
A	NEW ISSUE	AJS	12.03.02
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AJS	DRAWING NO.	REV. B
MFG. APPR.		D4472	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		FWD RIB ASSY	NTS
DATE	12.09.10	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES, OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



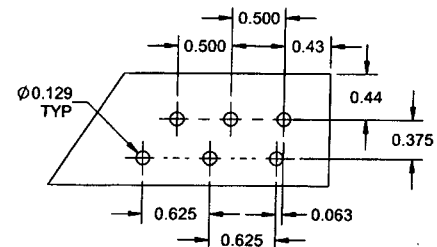
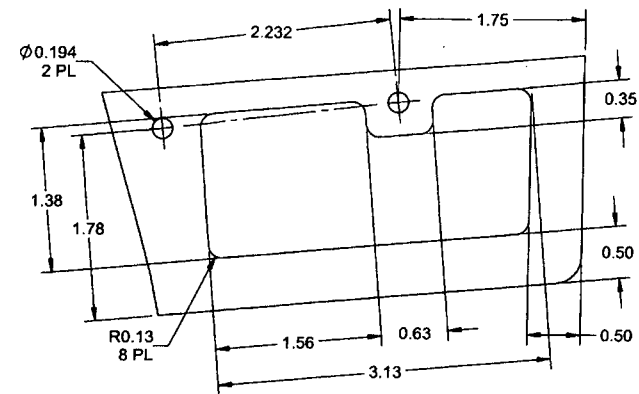
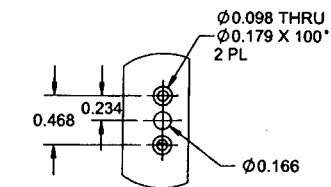
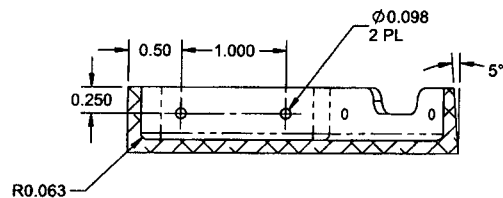
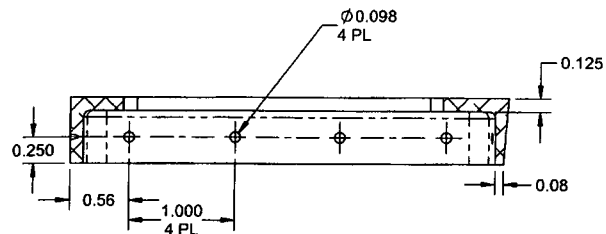
9 D4472-1 FWD RIB (LH)

NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME TEMPO GREY (4.2.1.3.2) PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.15 lbs
- 8) RAW MATERIAL SURFACE FINISH SUFFICIENT FOR THIS PART (DO NOT FACE MATERIAL)
- 9) ALL NON DIMENSIONED FEATURES PER CAD FILE "D4472-1-REVB.STP"

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AJS	DRAWING NO.	REV. B
MFG. APPR.		D4472	SHEET 2 OF 6
APPROVED		TITLE	SCALE
DE APPR.		FWD RIB ASSY	NTS
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2012-09-18

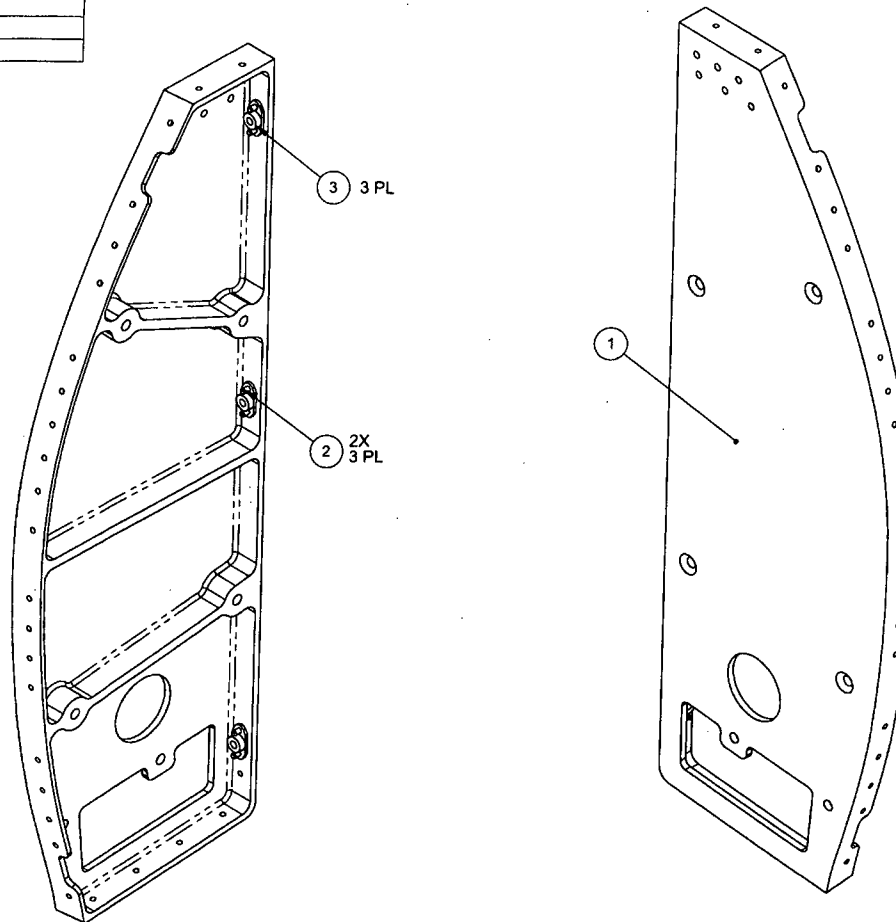


DETAIL D C5-3
NUTPLATE HOLE PATTERN 3 PL
(SCALE 2X)

DETAIL F D6-2
(SCALE 2X)

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AD	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D4472	SHEET 3 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FWD RIB ASSY	NTS
DATE	12.09.10	COPYRIGHT © 2012 BY DART AEROSPACE LTD	
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ITEM	QTY	P/N	DESCRIPTION
	X	D4472-042	FWD RIB ASSY (RH)
1	1	D4472-2	FWD RIB (RH)
2	6	MS20426AD3-5	RIVET, CSK
3	3	MS21069L08	NUTPLATE



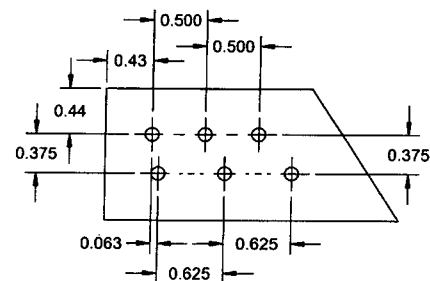
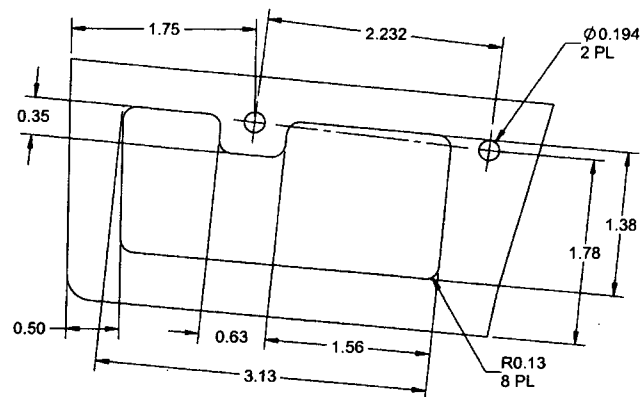
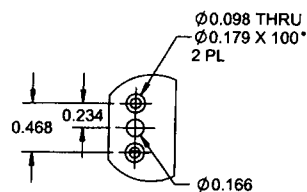
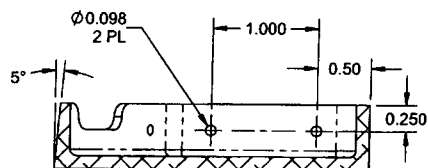
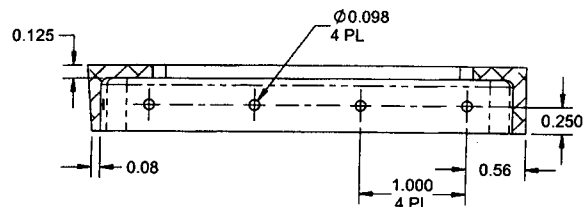
D4472-042 FWD RIB ASSY (RH)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.15 lbs

RELEASED
2012-09-18

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	A.P.	DRAWING NO.	REV. B
MFG. APPR.		D4472	SHEET 4 OF 6
APPROVED		TITLE	SCALE
DE APPR.		FWD RIB ASSY	NTS
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2012-09-26

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	A.P.	DRAWING NO. D4472	REV. B
MFG. APPR.		TITLE FWD RIB ASSY	SCALE NTS
APPROVED		COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DE APPR.			
DATE	12.09.10		

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29983**

Purchase Order Date 10/2/2015
PO Print Date 10/2/2015

Page Number 1 of 2

Order From :
ARCHER PRECISION INC.
2228 GLADWIN CRESENT
OTTAWA, ON K1B 4S6
CA

VC-GLO001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 613 899 2405

Ship To Contact
Ship To Phone
Ship Via: FedEx Overnight collect
Ship Acct:

Buyer
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB EXW - (Ex Works)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D4471-2P MACHINE AS PER DWG D4471 REV. B B137342	Mid Rib, LH	10/20/2015 Yes 10/20/2015		5.00 Each	\$158.33	\$791.65
Line Total:							\$791.65
2	D4472-2P AS PER DWG D4472 REV. B B137224	Fwd Rib, RH	10/20/2015 Yes 10/20/2015		5.00 Each	\$257.25	\$1,286.25
Line Total:							\$1,286.25
3	D4473-2P AS PER DWG D4473 REV. B B137179	Small Rib, RH	10/20/2015 Yes 10/20/2015		5.00 Each	\$85.92	\$429.60

PO Instructions: Fedex Acc#151793240

Note:

10/2/2015



2228 Gladwin Crescent
Ottawa, Ontario
K1B 4S6

Phone # 613-899-2405

Packing Slip

Date	Invoice #
10/30/2015	1783

Ship To
Main Finished Goods Location Dart Aerospace 1270 Aberdeen Street Hawksbury, Ontario K6A 1K7

P.O. No.	Ship	Via	FOB	Project
29983	10/30/2015	swift	Archer	

Qty	Item Code	Description
5 ✓ 3 ✓ 2 ✓ 5 ✓	Sales Sales Sales Sales	Line item 1 D4471-2P Mid Rib, LH Line item 2 D4472-2P Fwd Rib, RH Line item 2 D4472-2P Fwd Rib, RH *scrap* Line item 3 D4473-2P Small Rib, RH HST (ON) on sales
S215-11-04		

Dart Aerospace

22660

N° DE COMMANDE ORDER NO. P10:29983		SERV. DEPT.	DATE 15/10/02	
VENDU À SOLD TO		EXPÉDIER À SHIP TO Archer Precision		
ADRESSE ADDRESS		ADRESSE ADDRESS 2228 Gladwin Crescent Ottawa, ont. K1B-4S6		
DATE D'EXPÉDITION SHIPPING DATE	VIA	CONDITIONS TERMS	TAUX DE TAKE OR C.O. NO.	VENDU PAR SOLD BY
QUANTITÉ QUANTITY	DESCRIPTION		PRX PRICE	MONTANT AMOUNT
5pcs	D4471-2P B137342 mat: 6061T6 B1" x 4" B129167			
5pcs	D4472-2P B137224 mat: 6061T6 B1" x 6" B1300137 B129439			
5pcs	D4473-2P B137179 mat: 6061T6 B1" x 2.5"			
Thanks Chankel.				
SIGNATURE		N° UC. UC. NO.	TPS - GST TVH - HST TVP - PST	TOTAL

FORMULAIRE DE VENTE
SALES ORDER



2228 Gladwin Cres.
Ottawa, Ont.
K1B 4S6

Telephone (613) 899-2405
Fax (613) 226-1719

Certificate of Compliance

To:
Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury Ont.
K6A 1K7

2 November 2015

Po Number	Part Number	Quantities
29983	Line item 1 D4471-2P	5
29983	Line item 2 D4472-2P ✓	3 ✓
29983	Line item 3 D4473-2P	5

SP15-11-04

It is hereby certified that all articles mentioned above are in conformance with the requirements, specification and drawings as listed on customer purchase order number, 29983 issued by Dart Aerospace Inc.

Akos Jagodics
Quality Inspector
Archer Precision Inc.
2228 Gladwin Cress.
Ottawa, Ontario
K1B 4S6



INSPECTION REPORT

Date : 10/27/15



Customer : * u_cus *

Part No.: * u_prtnu *

Plan Name D4472 REVb2

Rev.:

Customer PO.: * u_Cuspo *

BSN :

Incr. Smpl No.: 2

Name	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-- -->
■ Hole 1 Diameter	D	1.24697	1.25000	0.01200	-0.00100	-0.00303	-0.00203
■ True Position_Hole 1	Po2d	0.00654	0.00000	0.03000		0.00654	-
	X	12.46340	12.46085			0.00255	
	Y	-2.18953	-2.18749			-0.00204	
■ Hole 2 Diameter	D	0.19852	0.19350	0.00500	-0.00100	0.00502	0.00002
■ True Position_Hole 2a	Po2d	0.00586	0.00000	0.03000		0.00586	-
	X	10.77915	10.77700			0.00214	
	Y	-0.55449	-0.55249			-0.00200	
■ True Position_Hole 2b	Po2d	0.00548	0.00000	0.03000		0.00548	-
	X	5.05576	5.05404			0.00172	
	Y	-0.57463	-0.57250			-0.00213	
■ True Position_Hole 2c	Po2d	0.00624	0.00000	0.03000		0.00624	-
	X	11.30089	11.29891			0.00198	
	Y	-4.26840	-4.26599			-0.00241	
■ True Position_Hole 2d	Po2d	0.00656	0.00000	0.03000		0.00656	-
	X	3.81224	3.80996			0.00228	
	Y	-3.30474	-3.30238			-0.00236	
■ Diameter_Hole 3a	D	0.16900	0.16600	0.00500	-0.00100	0.00300	--
■ True Position_Hole3a	Po2d	0.01789	0.00000	0.03000		0.01789	--
	Z	-0.24122	-0.25000			0.00878	
	X	1.25172	1.25000			0.00172	
■ True Position_Hole 3b	Po2d	0.01043	0.00000	0.03000		0.01043	--
	Z	-0.24538	-0.25000			0.00462	
	X	7.00241	7.00000			0.00241	
■ True Position_Hole 3c	Po2d	0.01502	0.00000	0.03000		0.01502	--
	Z	-0.24292	-0.25000			0.00708	
	X	14.00252	14.00000			0.00252	
■ Hole4 Diameter	D	0.09880	0.09800	0.00400	-0.00110	0.00080	--
■ True Position_Hole4	Po2d	0.00989	0.00000	0.03000		0.00989	--
	Z	-0.24817	-0.25000			0.00183	
	X	8.62932	8.62472			0.00460	
■ Diameter_Hole 5	D	0.09892	0.09800	0.00400	-0.00100	0.00092	-
■ True Position_Hole 5	Po2d	0.01107	0.00000	0.03000		0.01107	--
	Y	-1.50231	-1.49965			-0.00265	
	Z	-0.24514	-0.25000			0.00486	
■ Diameter_Hole 6	D	0.19465	0.19350	0.00500	-0.00100	0.00115	--
■ True Position_Hole 6	Po2d	0.00663	0.00000	0.03000		0.00663	-
	X	13.72179	13.71903			0.00276	
	Y	-1.75463	-1.75280			-0.00183	
■ True Position_Hole6b	Po2d	0.00709	0.00000	0.03000		0.00709	-
	X	13.97399	13.97128			0.00271	
	Y	-3.97291	-3.97063			-0.00228	
■ Diameter_Hole7a	D	0.13081	0.12850	0.00400	-0.00100	0.00231	--



BSN: 2

Name	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-- -->
■ True Position_Hole7a	Po2d	0.01077	0.00000	0.01000		0.01077	0.00077
	X	0.44136	0.43958			0.00178	
	Y	-0.43963	-0.43455			-0.00508	
■ True Position_Hole7b	Po2d	0.01094	0.00000	0.01000		0.01094	0.00094
	X	0.81633	0.81458			0.00175	
	Y	-0.50223	-0.49705			-0.00519	
■ True Position_Hole7c	Po2d	0.01052	0.00000	0.01000		0.01052	0.00052
	X	0.44157	0.43958			0.00198	
	Y	-0.93942	-0.93455			-0.00487	
■ True Position_Hole7d	Po2d	0.01101	0.00000	0.01000		0.01101	0.00101
	X	0.81639	0.81458			0.00181	
	Y	-1.12725	-1.12205			-0.00520	
■ True Position_Hole7e	Po2d	0.01113	0.00000	0.01000		0.01113	0.00113
	X	0.44137	0.43958			0.00178	
	Y	-1.43982	-1.43455			-0.00527	
■ True Position_Hole7f	Po2d	0.01140	0.00000	0.01000		0.01140	0.00140
	X	0.81629	0.81458			0.00170	
	Y	-1.75249	-1.74705			-0.00544	
■ Rib 1 Angle	A	65.49709	65.50000	0.50000	-0.50000	-0.00291	-
■ Rib 2 Angle	A	90.00020	90.00000	0.50000	-0.50000	0.00020	-
■ Rib3 Angle	A	97.99877	98.00000	0.50000	-0.50000	-0.00123	-
■ Pocket Depth	Z	-0.49980	-0.50000	0.00500	-0.00500	0.00020	-
■ Curve Form	CurvForm	0.00107	0.00000	0.01000	-0.01000	0.00107	-
■ Curve Form at .350	CurvForm	0.00717	0.00000	0.01000	-0.01000	0.00717	---